

EXPLORATION TECHNICAL MEMORANDUM

OK

Utah Coal Regulatory Program

August 9, 2006

TO: Internal File

THRU: Stephen J. Demczak, Environmental Scientist/Engineering, Team Lead *SJD by an*

FROM: *SK* Steve K. Christensen, Environmental Scientist/Hydrology

RE: Minor Coal Exploration, Hidden Valley Mine, Consolidation Coal Company, C/015/007, Task ID #2604

SUMMARY:

This Technical Memo addresses the hydrologic aspects of a Notice of Intent to Conduct Minor Coal Exploration. Consolidation Coal Company (Consol) submitted the exploration application to the Utah Division of Oil, Gas and Mining (the Division) on June 19th, 2006. The application proposes the advancement of nine coal exploration holes within the Hidden Valley property during 2006. The holes have been designated as HV-06-01 through HV-06-09 (see Plate 1, Proposed Hidden Valley Drill Holes).

Consol intends to drill nine 5- to 6- inch diameter rotary and 3- to 4- inch diameter core holes that will intercept one or more coal seams. The exploration will occur on surface owned by Consol and private coal leased by Consol. Less than 250 tons of coal will be removed under the provisions of the submittal.

The submitted application has adequately addressed the applicable provisions of the Coal Exploration rules (R645-200 through R645-203) and should be approved by the Division.

EXPLORATION TECHNICAL ANALYSIS:

COMPLIANCE DUTIES

Regulatory Reference: 30 CFR 772.13; R645-202.

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OPERATIONAL STANDARDS

Regulatory Reference: 30 CFR 772.13; R645-202-200.

Analysis:

Roads

The application meets the hydrology Operational Standards for roads as provided in **R645-202-232** (R645-301-742.410 through R645-301-742.420, R645-301-752.200, and R645-301-762).

The Division finds that the road performance standards of the coal exploration rules have been met provided the project does not require the construction of significant road access routes. Page 6 of the application states, "Consol will use only existing roads for this project. No new roads will be constructed."

Diversions of Overland flows and streams

The application meets the hydrology Operational Standards for diversions of overland flows and streams as provided in **R645-202-234**. The applicant states that no diversions of overland flows or ephemeral, perennial or intermittent streams are anticipated during the minor coal exploration. If diversions become necessary, the Permittee has committed to comply with the diversion regulations outlined in **R645-301-742.300**.

Hydrologic Balance

The application meets the hydrology Operational Standards for hydrologic balance as provided in **R645-202-235**. The application states that the coal exploration will be conducted in a manner that minimizes disturbance to the prevailing hydrologic balance. During exploration, the surface disturbance will be minimal. The surface disturbance will be primarily associated with efforts to level the rig and associated structures. Since surface disturbance will be minimized, no additional runoff during precipitation events is anticipated. No impoundments to contain runoff will be necessary.

Acid- or toxic forming materials

The application meets the hydrology Operational Standards for acid and/or toxic-forming materials as provided in **R645-202-236**. Page 7 of the application states, "no acid- or toxic-forming materials or coal waste will be produced, used or handled during the minor coal exploration activities."

Findings:

The information provided meets the minimum hydrology requirements of the Coal Exploration Compliance Duties-Reclamation Standards section of the State regulations.

RECLAMATION STANDARDS

Regulatory Reference: 30 CFR 772.13; R645-202-200.

Analysis:

Boreholes

The application meets the hydrology Reclamation Standards for reclaiming the boreholes as provided in **R645-202-243**. On page 4 of the application, the Permittee commits to plugging all the drill holes with cement after data collection activities have ended.

In addition, the application states on page 4 that after drilling is completed, each site will be graded to the approximate original contour, if necessary, and reclaimed. Reclamation work will include loosening soil that has been compacted by vehicle and equipment traffic during the course of the exploration activities. After the soils have been loosened, they will be reseeded. (See Page 5 of the application for the proposed seed mix).

The Permittee has also committed to the expedient removal of all associated equipment and materials. All trash and extraneous materials will be removed from the property and disposed of at an approved, off-site location.

Findings:

The information provided meets the minimum hydrology requirements of the Coal Exploration Compliance Duties-Reclamation Standards section of the State regulations.

RECOMMENDATIONS:

The information submitted meets the hydrology requirements specified in the Coal Exploration rules. The application should be approved.